Amendments to the Specifications:

Page 10, Paragraph 0034, replace with the following new paragraph:

[0034] Equation 2 can be manipulated to derive an equation for the service clock frequency, f_S, as a function of interpolated RTS values (RTS'), $f_S = F(RTS')$, as shown in Equation 3.

$$f_S = F(R'TSRTS') = \frac{\frac{f_{NET} \bullet Q}{2^P}}{\frac{R'TSRTS'}{2^P} + NUMBER\ OF\ WRAPS}$$

Page 10, Paragraph 0037, replace with the following new paragraph:

[0037] In equation 4, the value X represents the value that is written to the direct digital synthesis circuit to set the frequency of its output. The number n is the number of bits in the value to be written and f_{REF} is the frequency of the reference clock. Equation 4 can be solved for X in terms of the frequency of the service clock as shown in Equation 5:

$$X = \frac{2^n}{f_{REF}} F(R'TS)(RTS')$$

Page 12, Paragraph 0042, replace with the following new paragraph:

[0042] Microcontroller 116 can implement Equation 5 without the need to use floating point calculations. For example, Equation 5 can be modified as follows for delivering T1 service with a reference clock that is 19.44 MHz:

$$X = \frac{48,128\_8,192\_4,096}{R'TSRTS' + 4,720}$$